

CLAIMS

Having thus described the preferred embodiments, the invention is now claimed to be:

- JUL 27*
1. A ceiling grid object hanger comprising:  
a support body having a first portion having a first face and a second face, a longitudinal axis and a pivot axis, the support body lying within a support body plane;  
a first arm extending away from said first portion first face;  
a second arm extending away from said first portion first face, wherein said first arm is located on a first side of said longitudinal axis and said second arm is located on a second side of said longitudinal axis;  
a first protrusion extending from said first arm toward said first portion first face;  
15 a second protrusion extending from said second arm toward said first portion first face, wherein said first and second protrusions engage a first surface of an associated ceiling grid to releasably resist disengagement of said object hanger from the associated ceiling grid;  
20 a contact surface located on said first portion first face for contacting a second surface of the associated ceiling grid, wherein said contact surface extends completely across a width of said support body first portion; and,  
25 a first planar object support flange depending from said first portion and lying substantially in an object support plane, the object support plane being

approximately perpendicular to the support body plane and  
30 intersecting said pivot axis.

2. The ceiling grid object hanger of claim 1 wherein said first and second arms each further comprise a first region for engaging the associated ceiling grid early in an installation process, and a second region for 5 engaging the associated ceiling grid later in the installation process and wherein said first protrusion is located on said second region of said first arm, and said second protrusion is located on said second region of said second arm.

3. The object hanger of claim 1 further comprising at least a first attachment means located on said object support flange for supporting an object.

4. The object hanger of claim 1 further comprising:

a second portion, extending from said first portion a predetermined distance away from said pivot axis of 5 said support body in a first direction, parallel to said longitudinal axis; and,

a third portion, extending from said first portion said predetermined distance away from said pivot axis, parallel to said longitudinal axis, in a second direction 10 opposite said first direction.

5. The object hanger of claim 4 further comprising:

a third arm extending away from said second portion, and

5 ~~a fourth arm extending away from said third portion.~~

6. The object hanger of claim 4 further comprising:

a second object support flange including means to attach an object, said second object support flange  
5 extending from said second portion, and

a third object support flange including means to attach an object, said third object support flange extending from said third portion.

7. The object hanger of claim 1 wherein said first object support flange extends along said longitudinal axis.

8. The object hanger of claim 1 wherein said first object support flange comprises at least one projection extending laterally from a body of said first object support flange.

9. The object hanger of claim 1 further comprising a third protrusion, the third protrusion located on the support body, whereby the third protrusion cooperates with at least one of the first and second protrusions to increase the resistance to disengagement from said ceiling grid of said object hanger by engaging a surface of the ceiling grid opposite a surface of the ceiling grid engaged by at least one of the first and second protrusions.  
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10. The object hanger of claim 9 further comprising a fourth protrusion, the fourth protrusion located on the support body, wherein the third and fourth protrusions are located substantially opposite said first and second protrusions respectively, and whereby the third and fourth protrusion cooperate with the first and second

protrusions to increase the resistance to disengagement from the associated ceiling grid of said object hanger by engaging a side of the associated ceiling grid opposite a 10 side of the associated ceiling grid engaged by the first and second protrusions.

11. A ceiling grid banner hanger comprising:  
an elongated support body having a top side, an opposed bottom side and a longitudinal axis;  
a first arm extending away from said top side;  
5 a second arm extending away from said top side, wherein said first arm is located on a first side of said longitudinal axis and said second arm is located on a second side of said longitudinal axis;  
a first object support flange extending away from 10 said bottom side; and,  
a second object support flange extending away from said bottom side, in spaced relation from said first object support flange, said first and second object support flanges lying substantially in a single object 15 support plane.

12. The banner hanger of claim 11 wherein said object support plane is aligned with said longitudinal axis.

13. The banner hanger of claim 11 further comprising:

a first protrusion depending from said first arm and extending toward said top side; and,

5 a second protrusion depending from said second arm and extending toward said top side, wherein said first and ~~second~~ protrusions releasably engage an associated

ceiling grid surface to resist disengagement of said elongated support body from the associated ceiling grid.

14. The banner hanger of claim 11 further comprising:

a third arm extending away from said top side; and,  
a fourth arm extending away from said top side,  
5 wherein said third arm is located on said first side of  
said longitudinal axis and said fourth arm is located on  
said second side of said longitudinal axis, said third  
and fourth arms being spaced from said first and second  
arms.

15. The banner hanger of claim 14 wherein said support body has a rotational axis and wherein said first and second arms are located adjacent said rotational axis and said third and fourth arms are spaced radially away  
5 from said rotational axis.

16. The banner hanger of claim 11 further comprising at least one stiffening rib located on the first object support flange.

17. A ceiling grid banner hanger operative to suspend a sign from an associated ceiling grid, the hanger comprising:

a support body having a top side, an opposed  
5 bottom side and a longitudinal axis;  
a first arm extending away from said top side;  
a first protrusion extending from said first arm toward said top side;  
a second arm extending away from said top side;  
10 a second protrusion extending from said second arm toward said top side;

a third protrusion extending upwardly from said top side, wherein said first, second and third protrusions engage planar surfaces of an associated ceiling grid to  
15 resist disengagement of said support body from said associated ceiling grid and wherein said first, second and third protrusions releasably grip opposed surfaces of the associated ceiling grid to which the support body is selectively secured so that said support body can be  
20 manually removed without a need for tools to dislodge said first second and third protrusions from contact with the associated ceiling grid; and,

a first object support flange extending away from said support body bottom side.

18. The banner hanger of claim 17 wherein said first arm is located on a first side of said longitudinal axis and said second arm is located on a second side of said longitudinal axis.

19. The banner hanger of claim 17 wherein said third protrusion extends across said support body top side from one side edge of said support body to another side edge thereof.

20. The banner hanger of claim 19 wherein said third protrusion is oriented approximately transverse to said support body longitudinal axis.

21. The banner hanger of claim 17 wherein said third protrusion is centrally located between said first and second arms.

22. The hanger of claim 17 wherein said support body is substantially rectangular and

said first and second protrusions are located adjacent opposed corners of said support body.

23. A one-piece ceiling grid object hanger comprising:

a support body defining a support body plane and having a longitudinal axis and a rotational axis;

5 a first arm extending away from the support body;

a second arm extending away from the support body, wherein the first arm is located on a first side of the longitudinal axis and the second arm is located on a second side of the longitudinal axis;

10 a first tapered wall depending from the first arm, the first tapered wall tapering towards the longitudinal axis;

15 a second tapered wall depending from the second arm, the second tapered wall tapering towards the longitudinal axis, wherein the first and second tapered walls and the support body co-operate to engage an associated ceiling grid member with a progressively firmer grip as the object hanger is rotated from a disengaged position relative the associated ceiling grid into an engaged position, wherein said first and second tapered walls each extend across a width of their respective arms; and,

20 a first planar object support flange depending from the support body, the first planar object support lying substantially in a first object support plane, the object support plane being perpendicular to the support body plane and intersecting a rotational axis of the support body.

24. The object hanger of claim 23 further comprising:

a plateau, located on the support body between the first and second arms, the plateau serving as a pivot area around which the support body is rotated to place the first and second arms into a grip enhancing tension with the associated ceiling grid member when the first and second arms are in engagement with the associated ceiling grid member.

25. The object hanger of claim 23 further comprising:

a friction increasing plateau located on the support body, between the first and second arms.

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26. The object hanger of claim 23 further comprising:

a first extension, reaching outward from the support body a predetermined distance in a first direction, parallel to the longitudinal axis; and,

5 a second extension, reaching outward from the support body the predetermined distance in a second direction, the second direction being opposite the first direction.

27. The object hanger of claim 23 further comprising:

a third arm extending away from said first extension, and

5 a fourth arm extending away from said second extension.

28. The object hanger of claim 26 further comprising:

a second object support flange including means to attach an object, said second object support flange depending from said first extension, and

a third object support flange including means to attach an object, said third object support flange depending from said second extension.

29. The object hanger of claim 23 wherein the first and second arms include first and second stem portions and first and second flange portions respectively, wherein the first and second tapered walls extend from the first and second flanges respectively, and wherein the first and second flanges, carrying the first and second tapered walls, are connected to first and second stems by first and second neck regions respectively.

30. The object hanger of claim 29 wherein the first and second neck regions each have rectangular lower surfaces.

31. The object hanger of claim 29 wherein the first and second neck regions include reverse tapered sections.

32. The object hanger of claim 25 wherein the friction increasing plateau extends transversely across the support body top side from one side edge to another side edge.

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